

2. **Berkeley, M. J.** Notices of North American Fungi. Grev. **1**: 51. 1872.
3. **Berkeley, M. J.** Decades of Fungi No. 441. Jour. Bot. **6**: 164-165. 1854.
4. **Berkeley, M. J.** and **Broome, C. E.** List of Fungi from Brisbane, Queensland, Pt. II, Trans. Linn. Soc. 2d Ser., **2**: 61. 1882.
5. **Blume, Carl Ludwig von** and **Nees von Esenbeck, Theo. Fried.** Fungi javanici. Nova Acta Acad. Leop.-Carol. **13**: 14. pl. 3, fig. 1-3. 1826.
6. **Bresadola, G.** Polyporaceae Javanicae. Ann. Myc. **10**: 496. 1912.
7. **Bresadola, G.** Basidiomycetes Philippinenses I. Hedw. **51**: 311. 1911.
8. **Bresadola, G.** Synonymia et adnotanda Mycologica. Ann. Myc. **14**: 237. 1916.
9. **Cooke, M. C.** Australian Fungi, Grev. **10**: 98. 1881.
10. **Cooke, M. C.** Praecursores ad Monographia Polyporum. Grev. **14**: 21. 1885.
11. **Cooke, M. C.** Praecursores ad Monographia Polyporum. Grev. **15**: 20. 1886.
12. **Fries, E. M.** Epier. Syst. Myc. 471. 1838.
13. **Fries, E. M.** Hymen. Eur. 563. 1874.
14. **Lloyd, C. G.** Synopsis Genus Fomes. 223-224. 1915.
15. **Overholts, L. O.** The Polyporaceae of the Middle Western United States. Wash. Univ. Studies **3**¹: 59, 68. 1915.

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BUTOMUS UMBELLATUS ON THE ST. LAWRENCE RIVER.

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WHILE collecting plants along the St. Lawrence River at Ste. Angèle de Laval, opposite Three Rivers, Quebec, the last day of July, Mr. Edward B. Chamberlain and I were much surprised to find in the swampy land near the shore a striking endogenous plant that neither of us had seen nor heard of before. Good specimens were a meter tall, with an umbel of large pink flowers, veined with darker red. At the base was a short horizontal rootstock with a large cluster of ensiform leaves.

We soon discovered that the plant did not fit the ordinary key to the endogens, for the flower had three colored sepals, three larger petals, *nine* stamens, and six *separate* carpels.

Later investigation at the Gray Herbarium showed us that this handsome plant was *Butomus umbellatus* L. of the small family

Butomaceae, closely related to the *Alismaceae*, but distinct because of its nine stamens, six separate carpels, and the lack of placentae, as the ovules are borne all over the interior walls of the carpels. It is a marsh plant widely distributed in Europe and western Asia, commonly known as the flowering rush.

This species was first found on the St. Lawrence by Brothers Marie-Victorin and Rolland-Germain in 1905, at Laprairie on the flats (battures) of the river. It was soon after discovered at Beauharnois, Chateaugay, Valois and Longueuil, and was first reported in *Le Naturaliste Canadien* of May, 1908, and *The Ottawa Naturalist* of July, 1908. An independent appearance of the plant along the canal at Ottawa as early as 1906 was reported by E. H. Blackader in *The Ottawa Naturalist* of December, 1908.

By 1918 the plant had spread so fast that Brother Marie-Victorin wrote as follows:¹ "One of the latest floral acquisitions—a desirable one—made on the shores of the St. Lawrence, is the flowering rush, the umbellate *Butomus*, a very pretty plant which covers broad flats at least from Chateaugay to Nicolet, and which is especially abundant about Montreal. This beautiful Alismaceous species spreads rapidly, as is shown by its conquest of this large domain in less than forty years. It has not been reported elsewhere in America."

In our own travels the past summer we found *Butomus* at Ste. Angèle de Laval, Pointe du Lac, Berthierville, St. Sulpice and St. Lambert. In the Gray Herbarium is a specimen from the wet stony beach at Lachine, collected in 1922 by Judge J. R. Churchill, and another from the "zone intercotidale de la grève de Beauport" (near Quebec) collected by Brother Rolland in 1922. The flowering rush is evidently spreading rapidly down river. As it has many seeds, it would seem quite possible for it to work gradually up the St. Lawrence and its tributaries, so that some day it may make its appearance by Lake Ontario or Lake Champlain, within the limits of the United States.

A good description of the genus and species can be found in the *North American Flora*, Vol. 17, pt. 1. 63, 1909.

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¹ *Revue Trimestrielle Canadienne*, 263, November, 1918.